**Section 1.0: Introduction – WASH system strengthening and the SusWASH programme**

SusWASH is a five-year system strengthening initiative (2017–2022) which aims to improve living conditions and advance the fulfilment of the SDGs by ensuring sustainable and inclusive access to WASH. The programme is implemented in four countries (Cambodia, Ethiopia, Pakistan and Uganda) with an overarching global component to facilitate cross-country learning and technical support. The total budget is 79,000,000 SEK (~£6,750,000). SusWASH has provided us with an opportunity to apply system strengthening and learn about what drives and hinders system change. This report captures learning related to our practical implementation of system strengthening, providing insights on the utility of system strengthening as a way of working and on the human resources, skills, internal processes, learning cultures and adaptive management required to bring about positive change.

**1.1 The problem**

SDG 6 (clean water and sanitation) is seriously off track. Billions of people still lack access to safe WASH. Lack of progress on SDG 6 is undermining global health, education, prosperity, women’s empowerment and gender equality. Many countries will not achieve universal access to even basic levels of service by 2030 unless governments and donors assign greater importance to delivering and sustaining WASH, with emphasis placed on reaching marginalised people and ensuring WASH gains and service levels are maintained by in-country institutions on an ongoing basis.

In the countries where WaterAid works, the permanent institutions required to deliver, scale and sustain inclusive WASH are generally underfunded, under capacitated and lack accountability to all segments of the population. Government-led planning, monitoring and budgeting processes can be weak, with insufficient finance allocated to reach the most marginalised, service continuity, ongoing behaviour change and completion of the sanitation chain. Barriers to private sector involvement exist, particularly in rural areas. Public demand for improved WASH and adoption of good WASH behaviours remain inconsistent.

The rural water supply sector has evolved over the last 40 years to include sanitation and then hygiene as core components. It has also moved from the centralised hardware-based supply model of the 1980s to demand-driven community management in the 1990s. Serious sustainability concerns associated with both delivery models prompted a stronger appreciation of the need for improved external support from government and service providers. At the same time some NGOs shifted from a needs-based approach to a rights-based approach, placing greater emphasis on the obligations of the state to ensure WASH access for all. Greater decentralisation of WASH responsibilities to local government has not always come with the financial and human resource capital needed to enact these responsibilities.

Four interlinked challenges continue to stifle progress despite changing approaches to WASH delivery and management. These are:

1. **Poor WASH sustainability**: Positive gains in WASH coverage are reversed as services fall into disrepair, service levels decline and improved behaviours lapse.

2. **Social exclusion and weak accountability**: Service providers and regulators do not consistently prioritise poor and marginalised...
people for provision of improved WASH and the needs of poor and marginalised people may not be considered in the provision of WASH. Marginalisation can occur as a result of a combination of factors including a person’s income, age, gender, ethnicity, class, caste, sexuality, disability or health status and can inhibit WASH access. Mechanisms for holding service providers and regulatory authorities to account are typically weak.

3. Poor WASH scalability: Despite the existence of widely-used delivery approaches, low financial and institutional capacity mean that service provision and behaviour change strategies cannot meet current demand, let alone keep pace with growing demand.

4. Insufficient prioritisation and resourcing of learning and adaptation: Limited space for reflection on what works and what does not, coupled with a fear of admitting to and learning from failure, leads to the same mistakes being made and continuous application of ineffective implementation approaches.

These four interlinked challenges are symptomatic of weaknesses in the ‘system’ and highlight the need to use ‘systems thinking’ as a means of addressing them. If efforts are not made to tackle the systemic causes of these challenges, WASH implementers run the risk of applying outdated, ineffective delivery approaches that only bring about localised, short-lived results and reinforce dependency on external agencies.

Unless barriers in the system are addressed by all actors through collective action, progress towards achievement of SDG 6 will remain seriously off track and the human rights to water and sanitation will not be realised.

1.2 Systems thinking and WASH

WASH programmes are not isolated entities where there is a straightforward ‘best practice’ model that can be applied consistently to gain consistent results. Each programme exists in a wider system of complex social, political, environmental, institutional and technical factors. The interplay between these different factors and the interactions between different actors dictates what barriers stand in the way of WASH sustainability, scalability and inclusion as well as what drivers and leverage points can be used to bring about change. Systems thinking is increasingly being adopted by WASH practitioners as a means of understanding and dealing with this complexity.

Systems thinking has its origins in Complex Adaptive Systems Theory, which enables a more networked understanding of the environment in which actions are taken. The health sector has been applying systems thinking for some time and defines the health system as ‘all the organisations, institutions, resources and people whose primary purpose is to improve health’. This approach then breaks the system down into more manageable component parts or ‘building blocks’ that include: service delivery; health workforce; health information systems; access to essential medicines; financing; and leadership and governance.

Over the last 16 years, WASH practitioners have also sought to break the WASH system down into more manageable sub-components. For example, Harvey and Reed (2004) define several building blocks for hand pump sustainability. In 2009, WaterAid set out five building blocks for a functional WASH sector, which included: policy/strategy; coordination; institutional arrangements; finance; and performance monitoring. These building blocks are linked to political and economic development which drive change in the system as a whole. WaterAid's
Sustainability framework considers different elements required for WASH sustainability.\(^9\) The World Bank’s Country Status Overview (CSO) series; the UN-Water Global Analysis and Assessment of Sanitation and Drinking-water (GLAAS),\(^14\) the Sanitation and Water For All partnership (SWA)\(^16\) and UNICEF’s WASH Bottleneck Analysis Tool (WASH BAT)\(^16\) all use building blocks as a means of breaking down the WASH system into easier to manage component parts. A number of WASH actors have developed WASH system building block frameworks and tools including WaterAid,\(^17,18\) IRC-WASH,\(^19\) Water For People,\(^20\) WSUP\(^21\) and Agenda for Change.\(^22\) Although there are many frameworks for analysing the system and, to a lesser extent, monitoring change within it, there is a surprising level of commonality between all building block-based frameworks and tools.\(^23\)

It is clearly necessary to look beyond building blocks and consider the interactions and causal relationships that exist between components of the WASH system to really understand how change happens. The collective effect of how different components of the WASH system work together varies in different contexts. Building blocks are a useful way to break the system down into more manageable units for the purposes of participatory barrier analysis or identification of priority actions for programme design, but it is also necessary to understand social, political and environmental factors as well as power relationships that exist between individuals and their motivations and incentives to discern how the system functions. In other words, it is important to be mindful of the wider political economy which influences how the system behaves. When it comes to measuring change in the system, building block-based analysis can be useful. However, it is important to complement such analysis with assessments of inequalities, power relationships, institutional performance, service levels and the outcomes of JSR processes so as not to overlook important drivers necessary for progress.

There is always a trade-off in WASH programmes between the time and resources that can feasibly be spent understanding the WASH system and resourcing efforts to strengthen it. It is often not possible, desirable or useful to exhaustively map every component of the system. Rather, system mapping is meant to explore and build consensus about what is important to consider.\(^24\) Likewise, it is not necessary to work somewhere until the WASH system is perfect. The aim, for international NGOs (INGOs) like WaterAid, is to catalyse an improvement in the system so that it becomes ‘good enough’ to ensure sustainable and inclusive WASH. Application of adaptive management during programme implementation means it is possible to adjust work plans as understanding of the system deepens. As system change takes time, a long-term commitment to working in a district is required. Moving around between districts and closing out of districts after a short period of time may not result in lasting change.

The term ‘system’ sometimes invokes connotations of ‘the establishment’ or ‘the deep state’, but systems thinking does not simply encompass the supply side administrative functions of government or the workings of the state. Much like an ecosystem consists of a biological community of interacting organisms and their physical environment, relevant literature sums up the WASH system as actors, factors and the interlinkages between them.\(^4,5,6\) We understand the WASH system to be all of the people, behaviours, policies, processes, resources, interactions and institutions necessary for delivery of inclusive, lasting, universal access to WASH.\(^25\)

WaterAid is moving away from using the term ‘sector strengthening’ as it implies a supply side only effort. The benefit of using a systems framing is that it enables a more comprehensive, joined up way of working that encompasses empowerment, behaviour change and demand creation. Sustainability, gender equality, social inclusion, cross sector integration and scaling WASH provision are all intrinsically linked. Systems thinking provides a means of understanding barriers to achieve these WASH objectives and a roadmap for addressing them through system strengthening.
1.3 System strengthening and human rights

In 2010, the UN General Assembly recognised the human rights to water and sanitation through resolution 64/292 which calls upon states and international organisations to enable the provision of clean water and sanitation for all.26 This obligation is consistent with efforts to strengthen WASH systems to ensure these human rights are realised. Systems thinking encourages a focus on stakeholder participation and the underlying societal barriers that prevent people from accessing WASH. Practitioners could do more to integrate the use of the human rights principles, standards and the obligations of governments,27 service providers and people as drivers of system change. Similarly, the role of public pressure in driving system change could feature more strongly in some of the building block frameworks used to understand the dimensions of the WASH system. Unless efforts to improve the efficient functioning of institutions are people-centred and rights-based, it is likely that inequalities in access will continue to prevail. Strong public voice is a key bottom-up driver of system change. Consequently, WaterAid blends systems thinking with the underlying principles associated with the human rights to water and sanitation as well as efforts to build solidarity and empower all people to collectively claim their rights while fulfilling their own obligations.

1.4 Components of a WASH system

The strength of the WASH system is not simply a sum of its component parts. The collective effect of how component parts interact and work together is also important.4 All components are interlinked and interdependent; to strengthen one component will likely require complementary, collaborative and cross-sectoral efforts in a number of components. Emphasis is placed on government leadership and active, empowered people who collectively express their demand for WASH, play their role in

![Interacting components of a WASH system](image-url)
undertaking improved WASH behaviours and push for improvements to service levels. The human rights principles of non-discrimination and equality, access to information and transparency, participation, accountability and sustainability underpin our way of working. Figure 1 sets out the components of the WASH system. These components interact in different ways in different contexts.

**Active, empowered people and communities** are needed to monitor and ensure the continuation of responsive and accountable service provision and therefore the enjoyment of the human rights to water and sanitation. The realisation of the human rights to water and sanitation, in practice, requires a demand for improved services as well as a commitment to undertake improved WASH behaviours. It requires interaction between WASH users and service providers/regulators underpinned by an awareness of rights.

**Strong government leadership** is needed to ensure sustainable WASH is prioritised for investment and WASH interventions are coordinated to reach the most marginalised. Without government leadership, WASH interventions will be fragmented, unaligned to government policy and may not reach a larger scale.

**Gender and social inclusion.** In all countries there are population groups and people who are excluded from services because of where they live, the group they belong to or their individual identity. Ingrained power imbalances, cultural barriers and marginalisation must be tackled to ensure everyone’s WASH needs are met.

**Institutional arrangements** typically refer to institutions at all levels having clear roles and responsibilities, set out in government policy, with adequate human and financial resources available to fulfil these roles and responsibilities. This includes capacity in terms of available skills and staff to fill roles.

**Coordination and integration.** Government-led coordination of WASH actors around one plan is necessary to avoid duplication of effort and fragmented interventions that do not adhere to national standards. Integration of WASH across health, education and other sectors is necessary to achieve scale, sustainability and gender-inclusive outcomes.

**Monitoring** of sector performance enables progress to be tracked against sector targets and helps to inform where course correction is necessary. Ongoing service level monitoring, using harmonised indicators, helps government to develop strategic plans identifying where they and others should invest in WASH and target support to sustain WASH gains.

**Strategic planning.** Policies, strategies and plans at the national and local government level need to set out clear targets, standards and pathways for achieving and sustaining WASH delivery, align stakeholders behind a common vision, define clear roles and enable mobilisation of resources.

**Financing.** Sector financing strategies that cover all WASH life-cycle costs and consider economic inequalities, are critical for realisation of inclusive, lasting, universal access. Low public and private sector investment, inadequate fiscal decentralisation, ineffective processes for timely release of funds and low prioritisation of revenue allocation for capital maintenance, ongoing support and behaviour change mean WASH targets are not met or sustained.

**Service and behaviour change delivery.** WASH should be available to all on an ongoing basis. Service options, management arrangements, technologies, procurement processes, quality control processes and behaviour change strategies are necessary to deliver inclusive WASH and to sustain it. Service options have to be appropriate to the context in which they are implemented and resilient to various threats, including climate change.

**Accountability and regulation.** Governments are responsible for developing policies, laws and regulations and making decisions that affect people in society. Whilst WASH commitments may exist on paper they may not be implemented unless governments are held to account. Similarly, service providers, WASH users, donors, NGOs and civil society actors have responsibilities that may not be exercised unless they too are held to account.

**Environment and water resources.** Access to WASH is dependent upon the availability of sufficient quantities of good quality water. This is dependent upon well-managed water resources, healthy ecosystems and well-managed disaster mitigation.
Figure 2: Theory of change.
1.5 Theory of change

Figure 2 shows the theory of change applied in the SusWASH programme. This has been contextualised in each focus country to respond to national and sub-national barriers and priorities. We seek to bring about system change through partnership, thought leadership, practice advocacy, policy advocacy, campaigning, capacity development, empowerment and convening of sector actors around common goals. These efforts are informed by political economy analysis (PEA), our service delivery work, research, budget tracking and a continuous process of analysis, learning and adaptation.

The SusWASH programme is structured under five outcome areas (see Figure 2), each bringing together several components of the WASH system. All five outcomes are closely interlinked and interdependent. We believe that these outcomes, alongside an understanding of power dynamics and leverage points, are needed for a strong WASH system that delivers inclusive, lasting, universal access to WASH.

Our way of working requires complementary and reinforcing efforts at community, district, national and global levels to identify and tackle all barriers to WASH sustainability, scale and inclusion (see Figure 3). The district is the geographical entry point for WaterAid support. When barriers are identified at the district or city-level, efforts are targeted at higher levels (e.g. provincial or national levels) to seek sectoral reform. Global or regional level efforts (e.g. through SWA) are designed to complement national level reform processes. Once national level reform has been realised, we support its application and enforcement (e.g. through capacity development and mobilising civil society voices for policies to be implemented) back at the district level.

Figure 3: WaterAid works at multiple levels to unblock the systemic barriers to WASH inclusion, sustainability and scale.